From: Gregory J Fuhrer <gjfuhrer@usgs.gov>

Sent time: 05/21/2012 10:55:04 AM

To: Soscia.Marylou@epamail.epa.gov Cc: Cope.Ben@epamail.epa.gov

Subject: Re: Fw: CRT water temperature HEC-RAS proposal

Mary Lou,

There will be a Temperature Work Group meeting on May 30 to discuss this topic. As of now, there has been no resolution.

Greg

Gregory J. Fuhrer, Associate Director Oregon Water Science Center U.S. Geological Survey 2130 SW 5th Avenue Portland, OR 97201 503.251.3231 503.956.2542 (cell)

503.251.3470 (FAX)

From: Marylou Soscia <Soscia.Marylou@epamail.epa.gov>

To: gjfuhrer@usgs.gov

Cc: Ben Cope < Cope. Ben@epamail.epa.gov>

Date: 05/21/2012 10:40 AM

Fw: CRT water temperature HEC-RAS proposal Subject:

Greg; any resolution on the model wars? ml

Mary Lou Soscia | Columbia River Coordinator | US EPA

805 S.W. Broadway, Suite 500 | Portland, OR 97205

503.326.5873

www.epa.gov/region10/columbia http://twitter.com/EPAcolumbia

---- Forwarded by Marylou Soscia/R10/USEPA/US on 05/21/2012 10:39 AM -----

From: LUT Agnes <LUT.Agnes@deq.state.or.us> To: Marylou Soscia/R10/USEPA/US@EPA Date: 05/16/2012 04:11 PM

Subject: FW: FW: CRT water temperature HEC-RAS proposal

Thought you'd find this email informative....

From: Hatch, Keith [mailto:Keith.Hatch@bia.gov]
Sent: Wednesday, May 16, 2012 4:05 PM

To: LUT Agnes

Cc: Aikin, Scott; Redhorse, David

Subject: RE: FW: CRT water temperature HEC-RAS proposal

Agnes,

Let's see, 5 minutes to run the EPA's peer reviewed, validated and documented RBM-10 model, or \$91,300, 748 billable hours, and ~12 months for the COE to contract out to get HEC-RAS results per this table in the Corps proposal (attached).

Task	Cost	Duration	Estimated Completion Date
Task 1	\$6,600	64 hours	July 2012
Task 2	\$12,500	120 hours	August 2012
Task 3	\$28,900	280 hours	August 2012-March 2013
Task 4	\$9,900	96 hours	June 2012 – April 2013
Task 5	\$19,400	188 hours	April 2013
Administrative	\$14,000	N/A	_
Total	\$91,300	748 hours	

Why does this is reminding me of an certain DOD toilet seat?

Keith

From: LUT Agnes [mailto:LUT.Agnes@deq.state.or.us]

Sent: Wednesday, May 16, 2012 1:23 PM

To: 'Marylou Soscia'; Hatch, Keith **Cc:** Ben Cope; <u>rueda.helen@epa.gov</u>

Subject: RE: FW: CRT water temperature HEC-RAS proposal

Keith

Food for thought as you review the HEC-RAS proposal.

Initially HAC –RAS was developed as a hydro-dynamic model by ACOE with no temperature capability. The model was used to answer questions regarding the width and depth (geometry) and velocity of the system such as "how deep is the river", "is there shoaling going on".

Temperature has been added as a model component recently, but I'm not sure when. Additionally, it is unclear if the temperature component has been has been run, validated and documented for the mainstem Columbia River (Chief Jo to Bonneville – the reach we are specifically looking at).

As you are evaluating ACOE's proposal, please keep in mind the need to show the models temperature component use, validation and documentation for the mainstem Columbia. Additionally, what is the model's run-time for the 70-year period of record the Treaty is evaluating?

RBM-10 has been run, validated and documented for the mainstem Columbia River, as Mary Lou mentioned in her email for temperature TMDL development which is currently on-hold. It takes RBM-10 about 5 minutes to run the daily average temperature for the 70 year period.

Food for thought....

Agnes-

From: Marylou Soscia [mailto:Soscia.Marylou@epamail.epa.gov]

Sent: Tuesday, May 15, 2012 3:00 PM

To: Hatch, Keith

Cc: Ben Cope; LUT Agnes; <u>rueda.helen@epa.gov</u>

Subject: Re: FW: CRT water temperature HEC-RAS proposal

Importance: High

Keith:

Ben Cope is our technical expert on modeling. I am not.

I defer to Ben for an assessment of this modeling tool. I understand that this is not a water quality model and has limitations in assessing water temperature and hence there is concern about the use of this model. I am copying some other people that are way smarter than me so they can weigh in on this.

RBM-10 was developed by EPA to assess water temperature in the Columbia River Basin and has been peer-reviewed by engineering and modeling experts. However, the Corps has an "allergy" to EPA water temperature models and is unwilling to use this EPA tool hence the proposal for a hydrologic model that will be used to assess water temperature.

Mary Lou

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"Hatch, Keith" ---05/15/2012 02:34:40 PM---Marylou, You have an understanding and expertise of temperature modeling in the Columbia River.

From: "Hatch, Keith" < Keith.Hatch@bia.gov > To: Marylou Soscia/R10/USEPA/US@EPA

Date: 05/15/2012 02:34 PM

Subject: FW: CRT water temperature HEC-RAS proposal

Marylou,

You have an understanding and expertise of temperature modeling in the Columbia River. This look like a good approach to you?

Keith

----Original Message----

From: Abadie, William D NWP [mailto:William.D.Abadie@usace.army.mil]

Sent: Tuesday, May 15, 2012 1:11 PM

To: lauren@integratedwatersolutions.net; Marotz, Brian; Kruger, Rick; Agnes Lut; Aja Decoteau; Etheridge, Alexandra B.; Paulson, Anthony J.; Antonio Baptista; Apfelbeck, Randy; Beau Patterson; Ben Cope; Birgit Koehler; Bob Bukantis; Brian Crossley; Adkins, Candice B.; Catherine Corbett; Chad Brown; Chad Brown; Lay, Clyde H.; David Jay; Dianne barton; Don Essig; Duffe, Bruce J NWP; Elena Nilsen; Gary Passmore; Fuhrer, Gregory J.; Gelfenbaum, Guy R.; Hays, Steve; Jen Boyer; Jim Heffernan; John Barco; Johnson, Kimberly O NWD; Major, Jon J.; Josh Grice; Kconn@usgs.gov; Hatch, Keith; Keith Truscott; Easthouse, Kent B NWS; Lauren Casey; Postlethwait, Lori; Lyndal Johnson; Michelle Smith; Schneider, Michael L NWP; Wood, Molly S.; BPA Stephan, Nancy; Paul Wagner; Proctor, William D NWD; Rea, Matt T NWP; Ross Hendrick; English, Scott E NWD; Shane Bickford; Parkinson, Sharon E; Cox, Stephen E.; Juul, Steve T NWW; Rounds, Stewart A.; Terry Buchholz; Tom Dresser; Tyler Llewellyn; Waikele Hampton; Risley, John C.; Lundell, Tina M NWP; Briner, Wendy K NWP; Crain, James D NWP; Schneider, Michael L NWP; heib_critf.org; Buchholz, Robert J NWP Subject: CRT water temperature HEC-RAS proposal

Good afternoon,

Attached is the proposal to use HEC-RAS for water temperature modeling. This would be instead of RBM-10. Please submit your comments along with your recommendation of using RBM-10 or HEC-RAS by COB May 25th. This will be one of the main agenda items at our May 30th water quality work group meeting.

If you need a copy of the RBM-10 proposal, please let us know.

Thank you,

Bill

Bill Abadie Project Manager U.S. Army Corps of Engineers - Portland District 333 SW 1st Avenue PO Box 2946 Portland, OR 97208-2946 503-808-4732 (phone) 503-808-4736 (fax) William.D.Abadie@usace.army.mil

[attachment "HEC-RAS Proposal for CRT.docx" deleted by Marylou Soscia/R10/USEPA/US] (See attached file: HEC-RAS Proposal for CRT.DOCX) [attachment "HEC-RAS Proposal for CRT.DOCX" deleted by Gregory J Fuhrer/WRD/USGS/DOI]